

MIL-D-17951D(SH)
 20 July 1982
 SUPERSEDING
 MIL-D-17951C(SHIPS)
 5 June 1975
 (See 6.4)

MILITARY SPECIFICATION

* DECK COVERING, LIGHTWEIGHT, NONSLIP, ABRASIVE PARTICLE COATED FABRIC, FILM, OR COMPOSITE, AND SEALING COMPOUND

This specification is approved for use by the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers a self-adhering, nonslip deck tread or roll and sealing compound (where needed) for use aboard ship where safe footing is desired (such as the foot and head of ladders, and in front of serving tables in mess spaces).

2. APPLICABLE DOCUMENTS

* 2.1 Government documents.

2.1.1 Specifications and standards. Unless otherwise specified, the following specifications and standards of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

- PPP-B-566 - Boxes, Folding, Paperboard.
- PPP-B-576 - Boxes, Wood, Cleated, Veneer, Paper Overlaid.
- PPP-B-591 - Boxes, Shipping, Fiberboard, Wood-Cleated.
- PPP-B-601 - Boxes, Wood, Cleated-Plywood.
- PPP-B-621 - Boxes, Wood, Nailed and Lock-Corner.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Sea Systems Command, SEA 5523, Department of the Navy, Washington, DC 20362 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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- PPP-B-636 - Boxes, Shipping, Fiberboard.
- PPP-B-640 - Boxes, Fiberboard, Corrugated, Triple-Wall.
- PPP-B-676 - Boxes, Setup.
- PPP-C-96 - Cans, Metal, 28 Gage and Lighter.
- PPP-C-186 - Containers, Packaging and Packing for Drugs, Chemicals, and Pharmaceuticals.
- PPP-P-704 - Pails, Metal: (Shipping, Steel, 1 Through 12 Gallons).

MILITARY

- MIL-L-10547 - Liners, Case, and Sheet, Overwrap; Water-Vaporproof or Waterproof, Flexible.

STANDARDS

MILITARY

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-129 - Marking for Shipment and Storage.
- MIL-STD-147 - Palletized Unit Loads.
- MIL-STD-1623- Fire Performance Requirements and Approved Specifications for Interior Finish Materials and Furnishings (Naval Shipboard Use).

(Copies of specifications and standards required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

- * 2.2 Other publications. The following documents form a part of this specification to the extent specified herein. The issues of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applicable.

- * AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

- B74.12 - Size of Abrasive Grain - Grinding Wheels, Polishing and General Industrial Uses.

(Application for copies may be addressed to the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.)

UNIFORM CLASSIFICATION COMMITTEE AGENT

Uniform Freight Classification Ratings, Rules and Regulations

(Application for copies should be addressed to the Uniform Classification Committee Agent, Tariff Publication Officer, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

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NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION, INC. AGENT

National Motor Freight Classification

(Application for copies should be addressed to the National Motor Freight Traffic Association, Inc., ATA TRAFFIC Dept., 1616 "P" Street, N.W., Washington, DC 20036.)

* (Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

* 2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

3. REQUIREMENTS

3.1 Material (deck covering).

* 3.1.1 Deck covering backing. The deck covering shall consist of a backing with a uniform closed coat on one surface with abrasive particles of aluminum oxide or silicon carbide, minimum size number 60 grit in accordance with ANSI B74.12 bonded to the fabric, film, or composite with a resin or similar material. The back of the fabric, film, or composite shall be coated with a pressure-sensitive type of adhesive, and covered with a removable protective cover. Asbestos fibers and components containing asbestos fibers are prohibited. A certificate of compliance shall be required that the material is asbestos-free (see 6.2.2).

* 3.1.2 Recovered materials. Unless otherwise specified herein, all equipment, material, and articles incorporated in the products covered by this specification shall be new and shall be fabricated using materials produced from recovered materials to the maximum extent practicable without jeopardizing the intended use. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. None of the above shall be interpreted to mean that the use of used or rebuilt products is allowed under this specification unless otherwise specifically specified.

3.1.3 Adhesive and protective cover. The adhesive shall be pressure-sensitive, coated to cover the back side of the deck covering, and shall adhere immediately to smooth, clean, dry deck surfaces, without wrinkling, curling, breaking; or lifting. A protective cover shall be used to prevent contamination of the adhesive by foreign matter until the deck treads are applied.

* 3.1.4 Sealing compound. The sealing compound shall be of a cold-setting type, ready for use, shall have no deleterious effect on the steel or aluminum deck surfaces or on the decking material to which applied, and shall be capable of being stored in airtight metal containers for a minimum period of 18 months without deterioration.

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3.2 Protective cover removal. The average amount of effort required to strip the protective cover away from the adhesive film shall be as shown in table I (see 4.3.2 and 4.3.2.1).

TABLE I. Removal of protective cover.

Condition	Maximum effort required to pull protective cover away from adhesive film Ounces
As received	60
After 7 days aging at $150 \pm 5^\circ\text{F}$	60

3.2.1 Protective cover and adhesive transfer. There shall be no transfer of fragments of protective cover material to the adhesive surface, or adhesive to protective cover surface, when the protective cover is stripped away at a rate of 1 foot per second (see 4.3.2.2).

3.3 Adhesion.

* 3.3.1 Shear strength. The deck covering, when tested in accordance with 4.3.3, shall conform to the requirements of table II for not less than 1 minute.

TABLE II. Shear adhesive strength.

Minimum supported weight (pounds)	
No aging	After 7 days aging
10	10

* 3.3.2 Strip strength. The deck covering, when tested in accordance with 4.3.3.2 and 4.3.3.2.1 shall have the adhesive strength of table III.

TABLE III. Strip adhesive strength.

Drying time	Temperature	Adhesive strength (pounds), minimum
48 hours	$80 \pm 5^\circ\text{F}$	0.75

3.4 Thickness and weight. Deck covering shall not exceed 0.080 inch in thickness when applied to the steel decks, and shall weigh not more than 5 ounces per square foot (see 4.3.4).

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3.5 Resistance to detergent solution. Deck covering shall not soften, stain, streak, nor show any cosmetically objectionable loss in color when cleaned at regular intervals with detergents (see 4.3.5).

3.6 Nonslip properties. When tested as specified in 4.3.6, the material shall show factors of friction not less than those shown in table IV.

TABLE IV. Nonslip properties.

Property	Contacting surface condition		
	Dry	Wet	Oily
Factor of static friction:			
Leather	0.60	0.60	----
Rubber	.60	.60	0.60
Factor of sliding friction:			
Leather	.40	.40	----
Rubber	.50	.60	0.30

3.7 Fire performance. The fire performance of the deck covering shall conform to the maximum test requirements set forth in MIL-STD-1623 (see 4.3.7).

3.8 Size. Deck covering shall be furnished in treads 6 by 24 inches, 8 by 30 inches, or in rolls 1-1/2, 6, 8, 14, and 24 inches wide and 96 feet long, as specified (see 6.2.1).

3.9 Color. The color shall be black unless otherwise specified (see 6.2.1).

3.10 Solids content. The sealing compound shall have a total solids content of not less than 20 percent (see 4.3.8.1).

3.11 Ash content. The ash content on the solids of the sealing compound shall be not more than 4 percent (see 4.3.8.2).

3.12 Viscosity. The sealing compound shall have a viscosity of not less than 60 nor more than 160 seconds (see 4.3.8.3).

3.13 Labeling. Each container shall be clearly labeled with directions for application and with the following information:

- (a) Brand name.
- (b) Preparation of surface, including cleaning agents and primers, if required.
- (c) Method of application.
- (d) Limit of safe storage.
- (e) Safety precautions during application and storage.

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4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.2 Quality conformance inspection.4.2.1 Lot.

4.2.1.1 Deck covering. A lot shall consist of not more than 10,000 square feet of deck covering offered for delivery at one time.

4.2.1.2 Sealing compound. A lot shall consist of sealing compound from one manufacturing batch offered for delivery at one time.

4.2.2 Sampling for quality conformance inspection.

4.2.2.1 Sampling for visual and dimensional examination of treads. Sample treads shall be selected at random from each lot of deck covering with lot acceptance in accordance with MIL-STD-105, with an acceptance quality level (AQL) of 4.0 percent defective.

4.2.2.2 Sampling for visual and dimensional examination of material in rolls. From each lot of deck covering, sample rolls shall be selected at random with lot acceptance in accordance with MIL-STD-105 with an AQL of 4.0 percent defective.

4.2.2.3 Sampling for examination of sealing compound containers. From each lot of sealing compound, a random sample of filled containers shall be selected with lot acceptance in accordance with MIL-STD-105 with an AQL of 2.5 percent defective.

4.2.2.4 Sampling for tests of deck covering. Four representative 6- by 24-inch samples of deck covering shall be selected from each lot for tests. The samples selected shall be subjected to the tests specified in 4.3. If any sample fails any test, the lot shall be rejected.

4.2.2.5 Sampling for tests of sealing compound. A representative 1-quart sample of sealing compound from each lot shall be selected for the tests specified in 4.3. If the lot is offered for delivery in containers, the sample shall be taken at random from five containers, unless the lot is contained in fewer than five containers, in which case each container shall be sampled. The sample shall be kept in a tightly closed container to prevent evaporation. If any sample fails any test, the lot shall be rejected.

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4.2.3 Examinations.

4.2.3.1 Visual and dimensional examination of deck covering. Each of the sample treads or rolls selected in accordance with 4.2.2.1 and 4.2.2.2 shall be visually and dimensionally examined to determine conformance with the requirements of this specification which do not require tests.

4.2.3.2 Examination of sealing compound containers. Each sample filled container selected in accordance with 4.2.2.3 shall be examined for defects of the container and the closure, for evidence of leakage, and for unsatisfactory markings. Each sample filler container shall also be weighed to determine the amount of the contents. Any container in the sample having one or more defects or under required fill shall be rejected, and if the number of defective containers in any sample exceeds the acceptance number for that sample, the lot represented by the sample shall be rejected.

4.3 Test procedures.

4.3.1 Preparation of samples. The surface of the steel plates to which the deck covering is attached shall be free from all rust, scale, and organic matter. The steel samples with deck covering applied, including sealing compound, shall be cured for 48 hours at room temperature before conducting tests. Unless otherwise specified in the contract or order (see 6.2.1), all tests are referred to atmospheric conditions at a temperature of 70 to 75 degrees Fahrenheit ($^{\circ}\text{F}$), and relative humidity of 65 ± 2 percent.

4.3.2 Protective covering removal. Twenty specimens, 1- by 7-inches shall be prepared from each lot of deck covering. Ten specimens shall be tested immediately and ten specimens placed in an oven at $150 \pm 5^{\circ}\text{F}$ for 7 days, cooled for 2 hours, and then tested in accordance with 4.3.2.1. The amount of effort required to pull protective cover away from adhesive film shall be determined for each of ten specimens, the results averaged, and the average of the ten results shall not exceed the maximum values specified in 3.2.

4.3.2.1 Apparatus and procedure. The apparatus shall be a pendulum type tensile testing machine. The test shall be made with the stressing jaw moving at a speed of 12 inches per minute. The protective cover of the 1- by 7-inch specimen of deck covering shall be partially removed from one end sufficiently so that the free protective cover end may be placed in the stressing jaw and the deck covering end placed in the fixed jaw. The maximum tension required to remove the remainder of the protective cover shall be taken as the amount of removal effort required for each specimen. The pawls of the pendulum arm shall be taped back in an open position. The scale shall be graduated to record results in ounces.

4.3.2.2 Protective cover and adhesive transfer. The protective cover of a 6- by 24-inch tread shall be pulled away from the deck covering at a speed of 1 foot per second. The protective cover and the decking material shall then be examined for signs of transfer of adhesive to the protective cover surface and for retention of protective cover fragments by the adhesive surface (see 3.2.1).

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4.3.3 Adhesion.

4.3.3.1 Shear strength. Fifteen specimens, 1- by 7-inches, shall be prepared from each lot of deck covering. Five specimens shall be tested immediately and ten specimens conditioned in an oven at $150 \pm 5^\circ\text{F}$ for 7 days, and tested in accordance with 4.3.3.1.1. The results shall be as specified in 3.3.1.

4.3.3.1.1 Procedure. The protective cover shall be stripped back approximately 2 inches from one end of each 1- by 7-inch specimen as it is to be tested, care being taken to avoid any foreign matter coming in contact with the exposed adhesive film. With the use of a template such as shown on figure 1, the exposed end shall be adhered to a polished clean stainless steel plate so that exactly 1 square inch of the specimen has contact. The plate is then inserted in a jig and pressure applied by any suitable hydraulic or mechanical press to provide 65 pounds per square inch (lb/in^2) of pressure, in mounting test specimens. The specimen shall remain under this pressure for 1 minute. The ten specimens aged in oven at $150 \pm 5^\circ\text{F}$ for 7 days, and the five specimens without aging shall be mounted in the above manner, and allowed to set at room temperature for 48 hours after which time five each of aged and unaged specimens shall be tested for adhesion at room temperature ($80 \pm 5^\circ\text{F}$). The tests shall be made by fixing the steel plate in a vertical position leaving 6 inches of the specimen strip below to which a weight can be attached and suspended as shown on figure 2. Weight of the amount specified in table II shall be placed in the weight pan. The deck covering shall be considered to have passed this test if at least three of each group of five specimens have been capable of supporting the weights specified for a period of 1 minute.

4.3.3.2 Strip strength. Eight samples of high tensile steel plates and eight samples of galvanized steel plates each 10- by 16-inches by 1/8-inch thick, shall be prepared by buffing the surface on one side with a power driven flexible backed number 24 abrasive disk using such pressure as will just polish the surface of the metal. The buffed plates shall then be cleaned with a solvent. The deck-covering with protective cover removed, shall be applied to the clean steel plates by rolling five times in each direction with a roller traveling at approximately 7-1/2 feet per minute. The roller, as shown on figure 3 and figure 4 is composed of steel disks 7-inches in diameter and approximately 1/4-inch in thickness. The disks have a central hole 2 inches in diameter and are assembled on a 1/2-inch diameter rod, with a disk having a 5/8-inch hole fastened on each end. Accordingly, when the roller is pulled along by the handle the disks are free to align themselves vertically such that they conform to local irregularities of the specimen surface in 1/4-inch steps. The 7-inch diameter roller results in a loading of $10 \text{ lb}/\text{in}^2$ of width which approximates $65 \text{ lb}/\text{in}^2$. The results shall be as specified in 3.3.2.

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4.3.3.2.1 Procedure.

4.3.3.2.1.1 Adhesion at room temperature (80 + 5°F). Three specimens attached to tensile steel and three specimens attached to galvanized steel plate prepared as specified in 4.3.3.2 shall be employed. The specimens shall be allowed to dry for a total of 48 hours, and then immediately tested. The method of testing strip adhesion to metal shall be as shown on figure 5. Adhesive strength shall be taken as the highest load at which the separation in 1 minute does not exceed 1 inch. The average of the two highest values obtained on the three strips shall then be considered as the adhesive strength between the deck covering and the metal.

4.3.4 Thickness and weight. The deck covering shall be applied to three 6-inch square, 0.025-inch thick steel plates which have been previously measured and weighed. When the material has set for 48 hours, the three test specimens, including the steel plates, shall each be weighed to the nearest 0.1 ounce. The length and width shall be measured to the nearest 0.01 inch, and the thickness to the nearest 0.001 inch. From the difference between the weight of the coated steel plate and the uncoated steel plate, the weight of the material shall be computed in ounces per square foot per thickness as applied. The thickness shall be determined by measuring the steel plates, with and without the coating, at 16 equally distributed points on the specimen, by means of a dial thickness gage and a template. The difference in thickness of the mounted steel plate and the coated steel plate shall be averaged to determine the thickness of the material. The final weight shall be the average of the three specimens, and shall not exceed the requirements of 3.4.

4.3.5 Resistance to detergent solution. Specimens of deck covering 6- by 2-inches shall be immersed for 1 hour in the solution specified herein so that a 3-inch section of the specimen is immersed in the solution and the upper half remains unexposed for purposes of comparison. The liquid solution shall be made by dissolving a detergent in tepid water to form a 1/2 of 1 percent solution, then adding lamp-black until the solution is dark gray. After immersion, the specimen shall be rinsed for 1 minute with tap water at 140°F and dried with an air jet. The specimen shall then be examined for softening, stains, streaking, or loss of color as required in 3.5.

4.3.6 Nonslip properties. The factors of friction of the deck covering against leather and rubber shall be determined, respectively. The leather shall be oak-tanned sole leather which has been sanded smooth with grade 0 garnet paper. The rubber shall be a vulcanized compound with a hardness range of 60 to 80 durometer "A". Tests shall be made with the contact surfaces dry; wet with a solution of 4 percent sodium chloride in water; and oiled, using SAE 10W oil at a temperature between 60 and 80°F. The leather and rubber shall be cut to a size 2- by 4-inches and mounted on a block of the same size. A load of 33 pounds shall be applied uniformly over the 2- by 4-inch block during the test. A pendulum-type tensile testing machine shall be used to measure the force required to move the weight block on the deck-covered surface. The moving jaw of the tensile testing machine shall be set to move at the rate of 7-1/2 feet per minute. Approximately one cup of the salt water solution shall be poured over the deck covering surface in making the wet test. For the oil test, the oil shall be applied to the center of the leather or rubber sample and on the deck covering surface sufficient to spread evenly over the entire surface. The nonslip properties shall conform to 3.6.

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4.3.7 Fire resistance test. The test shall be conducted in accordance with the test method specified in MIL-STD-1623.

4.3.8 Sealing compound tests.

4.3.8.1 Determination of solids content. The total solids content shall meet the minimum requirements in 3.10 when determined as follows:

Approximately 10 grams of the compound shall be placed in a low-form weighing bottle, 60 millimeters (mm) wide by 30 mm high. The bottle shall be covered and weighed. The cover shall be removed and all solvent evaporated at 158°F (approximately 4 hours required). The bottle shall then be placed in a desiccator to cool, and to be weighed.

$$\text{Percentage of total solids} = \frac{\text{weight of residue}}{\text{weight of sample}} \times 100$$

4.3.8.2 Determination of ash content. Using a porcelain crucible or dish, add 10 to 25 milliliters of compound, carefully weighing the amount added. Place on a stone slab on the floor of a hood. Ignite by playing the flame of a burner on the surface of the sealer and allow to burn quietly until most of the compound is burned off; then transfer to a muffle or over a flame and continue heating at a low temperature (not over a dull red) until all carbonaceous matter is consumed. Cool, weigh, and compute in percentage of ash (see 3.11).

4.3.8.3 Viscosity.

4.3.8.3.1 Apparatus. The apparatus shall be a Ford cup type viscosimeter, or equivalent, and shall consist of a heavy polished metal cup with a conical bottom fitted with a standard 1/4-inch diameter orifice. The cup shall be provided with an overflow well at the top and the tip shall be protected by a cylindrical jacket extending 1/4-inch below the orifice. The cup shall be held in a ring support during the test.

4.3.8.3.2 Method of test. The cup shall be filled by holding the index finger over the orifice until the cement just overflows. The finger shall then be released, and the time noted at the first evidence of a break in flow of the cement through the orifice. The test shall be conducted at a temperature of $80 \pm 5^\circ\text{F}$. The viscosity shall be taken as the average of three tests to meet the requirements of 3.12.

4.4 Inspection of packaging. Sample packages and packs and the inspection of the packaging, packing, and marking for shipment and storage shall be in accordance with the requirements of section 5 and the documents therein.

5. PACKAGING

(The preparation for delivery requirements specified herein apply only for direct Government acquisitions. For the extent of applicability of the preparation for delivery requirements of referenced documents listed in section 2, see 6.3.)

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5.1 Packaging. Packaging shall be level A or C, as specified (see 6.2.1).

5.1.1 Level A.

5.1.1.1 Deck covering. Deck covering of like kind and size and in quantities specified shall be packaged in fiberboard boxes conforming to class weather-resistant of PPP-B-636. Box closure, waterproofing and reinforcing shall be in accordance with method V of the appendix to the box specification.

5.1.1.2 Sealing compound. Sealing compound shall be furnished in 5-ounce metal collapsible tubes, 1 gallon cans, or in 5 gallon pails, as specified (see 6.2.1).

5.1.1.2.1 Collapsible tubes. Five-ounce collapsible tubes shall conform to type II, class B of PPP-C-186. Each tube shall be placed in folding or set-up paperboard box conforming to PPP-B-566 or PPP-B-676 at the option of the contractor. Box closure shall be as specified in the appendix to the applicable box specification.

5.1.1.2.2 One-gallon cans. One-gallon cans shall conform to type V, class 2 of PPP-C-96. Exterior plan B coating and side seam striping shall be required. Cans shall be provided with wire handles which shall be galvanized or protectively coated to resist corrosion. After filling, the plugs shall be spot soldered to the friction ring at three points, spaced equidistant from each other around the periphery of the plug.

5.1.1.2.3 Five-gallon pails. Five-gallon pails shall conform to type II of PPP-P-704.

5.1.2 Level C. Deck-covering and sealing compound shall be packaged in such a manner that will afford protection against deterioration, physical damage, and loss of contents during shipment from supply source to the first receiving activity for immediate use. The contractor's commercial practice may be used when such meets the requirements of this level.

5.2 Packing. Packing shall be level A, B, or C as specified (see 6.2.1).

5.2.1 Level A. Deck-covering shall be packed in containers conforming to any one of the following specifications at the option of the contractor:

<u>Specification</u>	<u>Type or class</u>
PPP-B-576	Class 2
PPP-B-591	Class 2
PPP-B-601	Overseas type
PPP-B-621	Class 2
PPP-B-636	Class weather-resistant
PPP-B-640	Class 2

Shipping containers shall have caseliners conforming to MIL-L-10547. Caseliners shall be closed and sealed in accordance with the appendix to MIL-L-10547. Caseliners for class weather-resistant or class 2 fiberboard boxes conforming to PPP-B-636 or PPP-B-640 may be omitted provided all corners and edge seams

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and manufacturer's joints are waterproofed in accordance with the appendix to the box specification. Boxes shall be closed, strapped, or banded in accordance with the applicable box specification or appendix thereto, except that metal strapping shall not be used on fiberboard boxes, and boxes conforming to PPP-B-636 shall be closed, waterproofed, and reinforced in accordance with method V of the appendix to the box specification. The gross weight of wood or wood-cleated boxes shall not exceed 200 pounds, and fiberboard boxes shall not exceed the weight limitations specified in the applicable fiberboard box specification.

5.2.1.1 Sealing compound.

5.2.1.1.1 Collapsible tubes. Collapsible tubes shall be packed in accordance with level A of PPP-C-186.

5.2.1.1.2 One- and 5-gallon containers. One-gallon cans shall be arranged and packed level A in accordance with the appendix to PPP-C-96. Five-gallon pails shall require no additional packing. Five-gallon pails may be palletized if specified (see 6.2.1).

5.2.2 Level B. Deck covering shall be packed in boxes conforming to any one of the following specifications at the option of the contractor.

<u>Specification</u>	<u>Type or class</u>
PPP-B-576	Class 1
PPP-B-591	Class 1
PPP-B-601	Domestic type
PPP-B-621	Class 1
PPP-B-636	Class domestic
PPP-B-640	Class 1

Box closures shall be as specified in the applicable box specification or appendix thereto. The gross weight of wood or wood-cleated boxes shall not exceed 200 pounds and fiberboard boxes shall not exceed the weight limitations specified in the applicable fiberboard box specification.

5.2.2.1 Sealing compound.

5.2.2.1.1 Collapsible tubes. Collapsible tubes shall be packed in accordance with level B of PPP-C-186.

5.2.2.1.2 One- and 5-gallon containers. One-gallon cans shall be arranged and packed level B in accordance with the appendix to PPP-C-96. Five-gallon pails shall require no additional packing. Five-gallon pails may be palletized when specified (see 6.2.1).

5.2.3 Level C. Packing shall be accomplished to insure acceptance by common carrier and to afford protection against physical damage during direct shipment from the supply source to the using activity for early use. The shipping containers or method of packing shall conform to the Uniform Freight or National Motor Freight Classification Rules and Regulations or other carrier regulations as applicable to the mode of transportation.

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5.3 Pallets. Five-gallon pails shall be palletized in accordance with MIL-STD-147 when specified (see 6.2.1).

5.4 Marking. In addition to the labeling specified in 3.13 and any special marking required by the contract or order (see 6.2.1), unit and interior packages, shipping containers, and palletized unit loads shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. This deck covering is intended for use aboard ship where safe footing is desired such as the foot and head of ladders and in front of serving tables in messing areas. The sealer is used to seal the periphery of the tread to prevent ingress of water and other liquids especially for cotton-backed treads.

* 6.2 Ordering data.

6.2.1 Acquisition requirements. Acquisition documents should specify the following:

- (a) Title, number, and date of this specification.
- (b) Size of treads or width of rolls required (see 3.8).
- (c) Color of deck covering, if other than as specified (see 3.9).
- (d) Quantity and container size of sealing compound required (see 5.1.1.2).
- (e) Atmospheric testing conditions, if other than specified (see 4.3.1).
- (f) Levels of packaging and packing required (see 5.1 and 5.2).
- (g) Packaging of sealing compounds, as specified (see 5.1.1.2).
- (h) When palletization is required (see 5.2.1.1.2, 5.2.2.1.2, and 5.3).
- (i) Special marking, if required (see 5.4).

* 6.2.2 Data requirements. When this specification is used in an acquisition which incorporates a DD Form 1423, Contract Data Requirements List (CDRL), the data requirements identified below shall be developed as specified by an approved Data Item Description (DD Form 1664) and delivered in accordance with the approved CDRL incorporated into the contract. When the provisions of DAR 7-104.9 (n) (2) are invoked and the DD Form 1423 is not used, the data specified below shall be delivered by the contractor in accordance with the contract or purchase order requirements. Deliverable data required by this specification is cited in the following paragraph.

<u>Paragraph no.</u>	<u>Data requirements title</u>	<u>Applicable DID no.</u>	<u>Option</u>
3.1.1	Certificate of compliance	DI-E-2121	_____

(Data item descriptions related to this specification, and identified in section 6 will be approved and listed as such in DoD 5000.19L., Vol. II, AMSDL. Copies of data item descriptions required by the contractors in connection with specific acquisition functions should be obtained from the Naval Publications and Forms Center or as directed by the contracting officer.)

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* 6.2.1.1 The data requirements of 6.2.2 and any task in section 3, 4, or 5 of the specification required to be performed to meet a data requirement may be waived by the contracting/acquisition activity upon certification by the offeror that identical data were submitted by the offeror and accepted by the Government under a previous contract for identical item acquired to this specification. This does not apply to specific data which may be required for each contract regardless of whether an identical item has been supplied previously (for example, test reports).

* 6.3 Sub-contracted material and parts. The preparation for delivery requirements of referenced documents listed in section 2 do not apply when material and parts are acquired by the contractor for incorporation into the equipment and lose their separate identity when the equipment is shipped.

6.4 Changes from previous issue. The margins of this specification are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Preparing activity:
Navy - SH
(Project 7220-N218)

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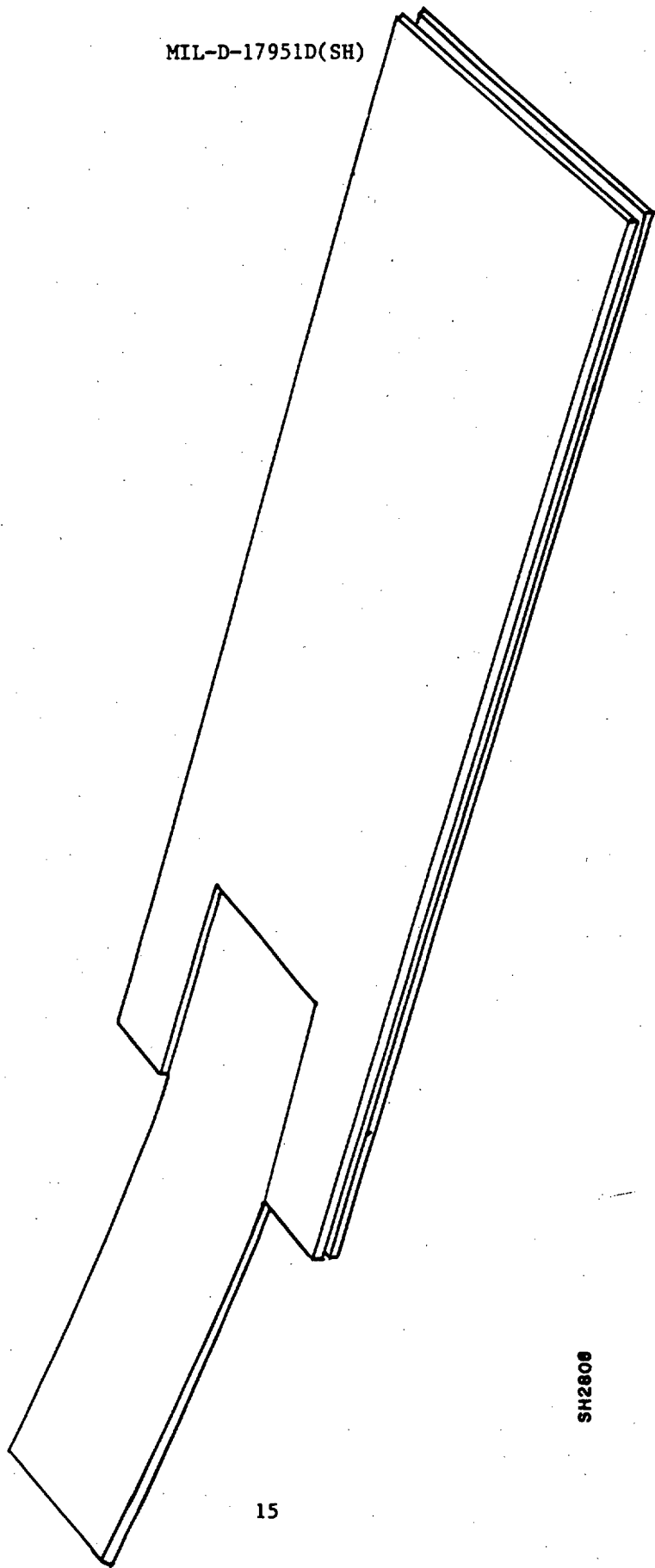


FIGURE 1. Template.

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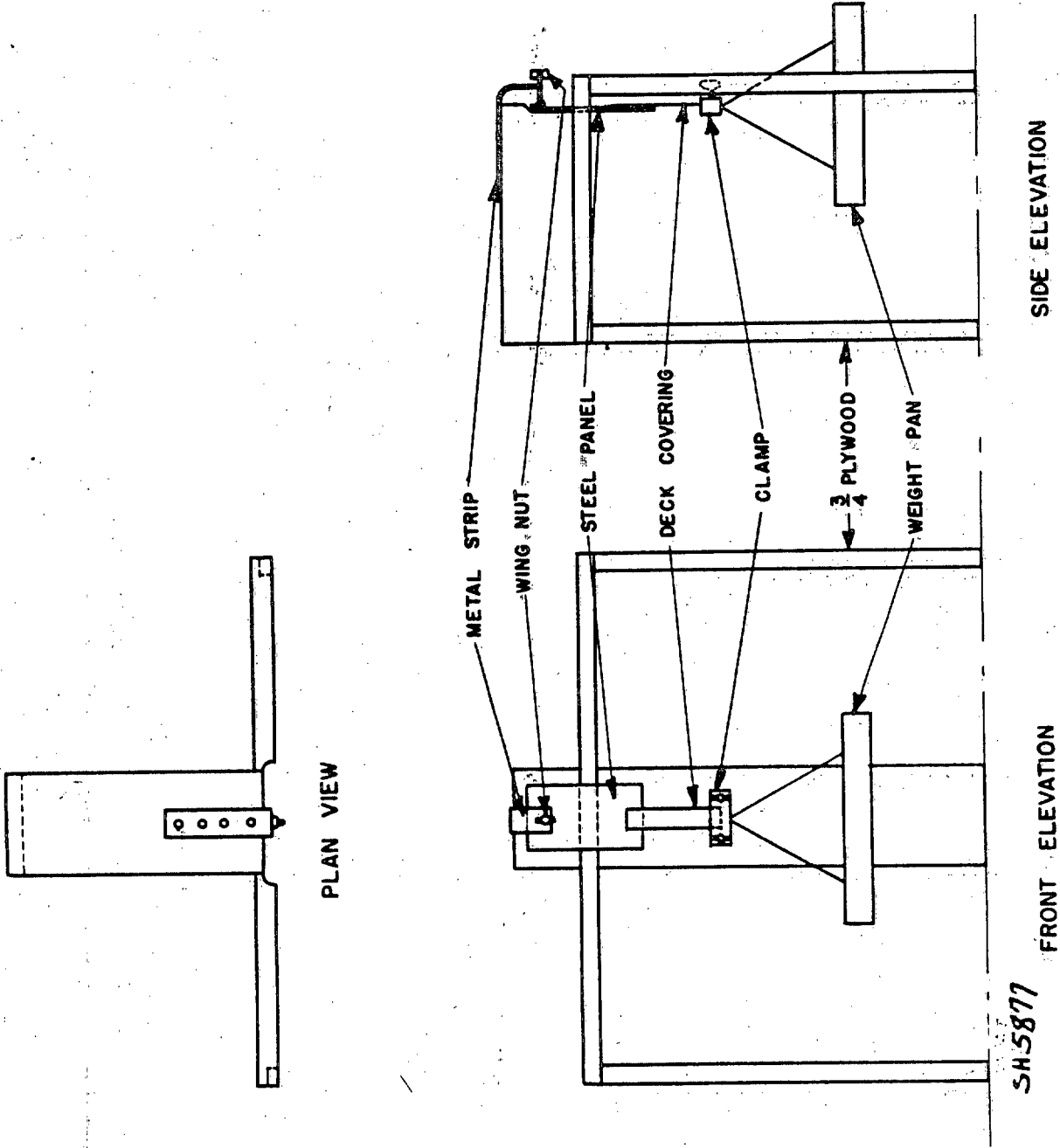
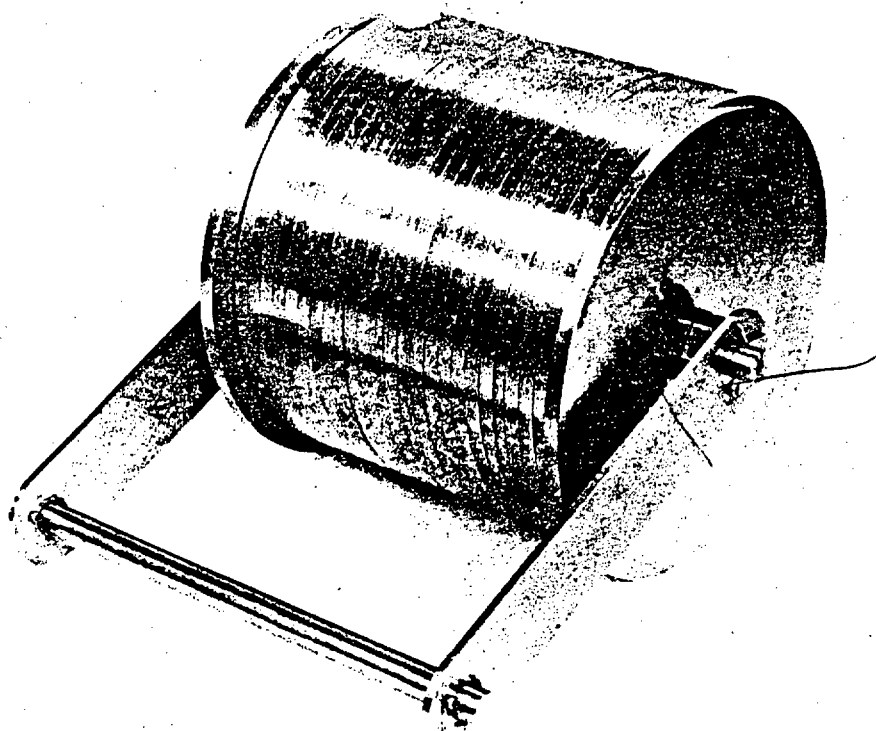


FIGURE 2. Adhesion testing machine.

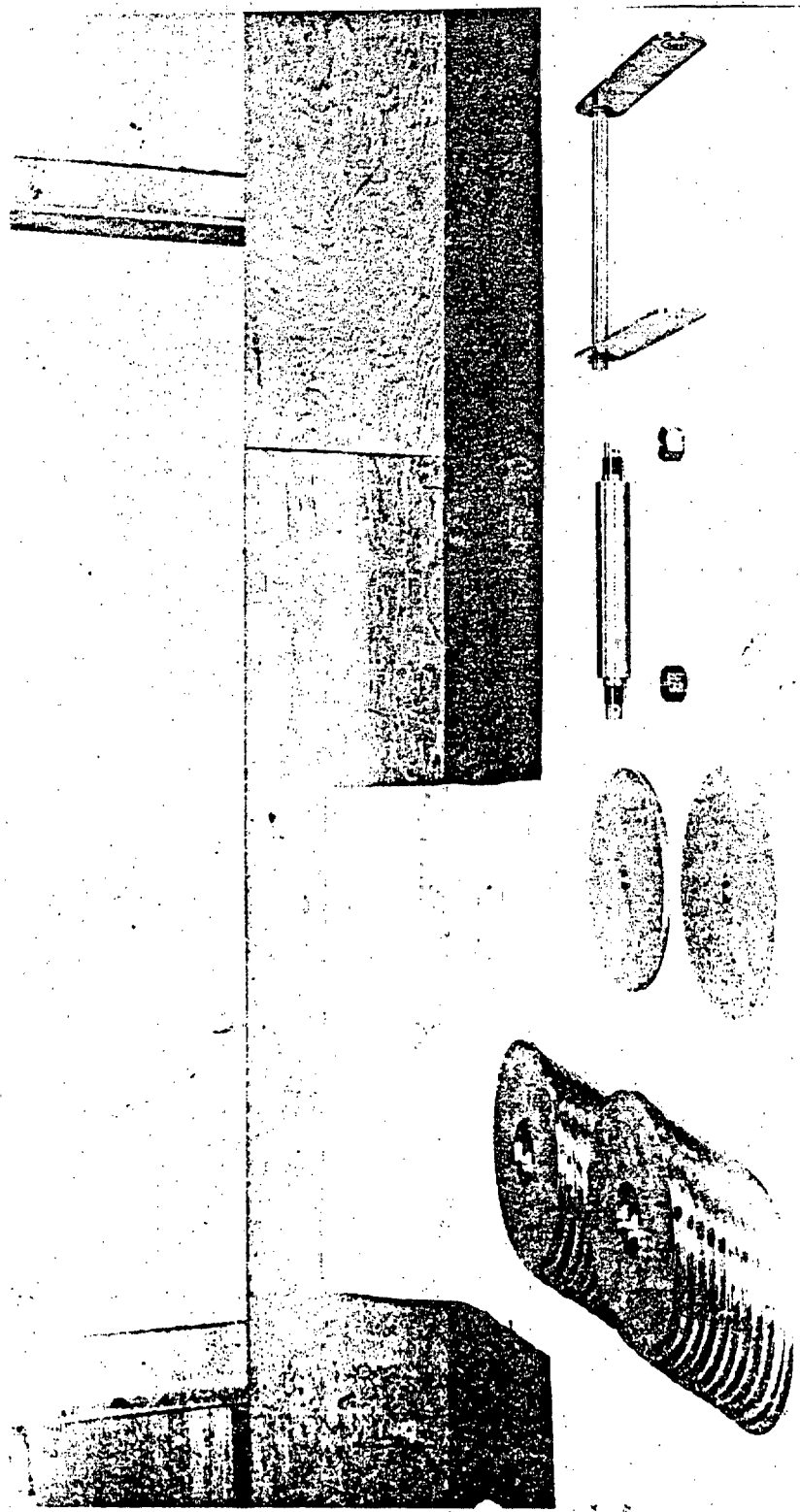
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FIGURE 3. Multidisk roller for preparation of strip adhesion strength specimens assembled view.

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FIGURE 4. Multidisk roller for preparation of strip adhesion strength specimens disassembled view.

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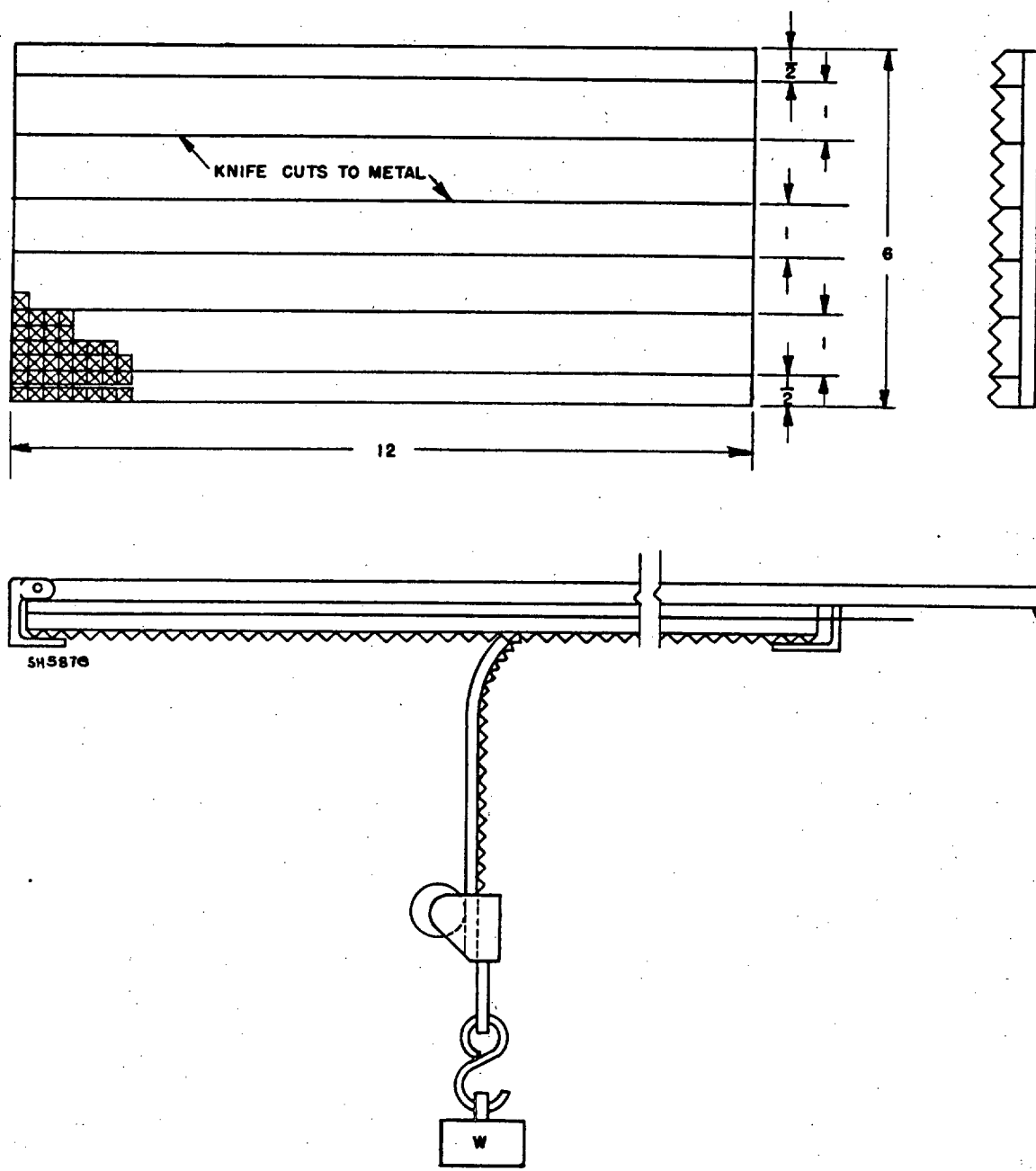


FIGURE 5. Strip adhesion test.

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